

Math 120 – Week 9 Assignments Spring 2003

Monday March 24 *Class 21:*

Exam Report. We shall return to solving initial value problems, this time using the technique of **separation of variables**.

Homework #11: (4 points)

Smith & Minton, page 519: 14, 16, 19, 23

READING: *Smith & Minton* Section 6.5 (pages 512–520)

Due on Wednesday in *Class 22*

Wednesday March 26 *Class 22:*

Introduction to Improper Integrals. We shall consider how the fundamental theorem of calculus has to be modified when the interval of integration becomes infinitely large or the integrand becomes undefined or infinitely large on the interval of integration.

Homework #12: (6 points)

Smith & Minton, page 616-617: 3, 4, 5, 6, 11, 12, 13, 24, 31, 32

READING *Smith & Minton*, Section 7.7 (pages 604–619)

Due in *Class 23*

Thursday March 27 *Lab 5 :*

Lab 4: Simpson's Rule report DUE at the beginning of lab.

Improper Integrals. We shall analyze methods for determining the convergence/divergence of improper integrals and review properties of limits in order to come up with convergence/divergence rules for improper integrals.

Friday March 28 *Class 23 :*

Comparing Improper Integrals. We shall get more practice with evaluating improper integrals by comparing integrals we can't use the FTC on to integrals we can use our **rules of convergence/divergence for improper integrals** on.

Homework:

Quiz #7: Separation of Variables

Due on Monday in *Class 24*